

REVIEWS OF BOOKS.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. Volume III. Edited by J. EWING MEARS, M.D., Recorder of the Association. Philadelphia ; P. Blakiston, Son & Co. 1885. Large 8vo., pp. 396.

This elegant volume contains the work of the meeting of the association held in Washington, D. C., in April, 1885. The papers are not as numerous as in the preceding volume, but the elaborate and exhaustive character of some of them give to this volume a special value. The paper of Dr. Roberts, on The Operative Surgery of the Brain, and that of Dr. N. Senn, on Air-Embolism, have already appeared in the pages of the ANNALS OF SURGERY. The elaborate statistical study of nephrectomy, by Prof. S. W. Gross, has also been given to the readers of this journal in abstract from the full text which was published in the Am. Journ. Med. Sciences. A paper by Prof. P. S. Conner, on The Etiology of Traumatic Tetanus, elicited much discussion in the way of the relation of clinical observations, none of which, however, threw any light on the vexed question of the cause of tetanus, nor added anything to therapeutic knowledge. The papers by Prof. Tiffany, on Nephrolithotomy, of Dr. Gouley, on the Surgery of the Hypertrophied Prostate, and of Dr. Mears, on Phosphorus Necrosis of the Jaws, will be found, in abstract, in the Index of Surgical Progress department of the present number of the ANNALS. The volume concludes with a description by Dr. Prince of a device for securing purity of the atmosphere in an operating room. It consists, essentially, in arrangements by which the air is passed through a series of compartments, where it is subjected to the action of sprays and artificial showers, before it is admitted into the room. It is fortunate that practically it has been demonstrated that the asepticity of wounds can be secured by much less complicated methods than those here described.

This volume, as a whole, in the permanent value of its contents, excels its predecessors. Its examination must inspire in every reader a sincere respect for the association whose work it represents.

L. S. PILCHER.

BLÜTUNG, BLUTSTILLUNG, TRANFUSION NEBST LUFTEINTRITT UND INFUSION. Bearbeitet von Dr. W. HEINEKE, Professor der Chirurgie zu Erlangen. Mit 14 in den Text gedruckten Holzschitten. Stuttgart: Verlag von Ferdinand Enke. 1885. Pp. XXXV-158.

This volume (No. 18 of the "Deutsche Chirurgie") although it deals with rather a limited range of subjects, is inferior in evidences of careful preparation to few of the series which have preceded it.

An extensive bibliography precedes the introductory section. The work is divided into three parts, the first of which, including upwards of sixty pages, treats of hæmorrhage, the second (pages 68 to 129), of its treatment, and the last of transfusion; these are further divided and subdivided with scientific precision. Hæmorrhage is defined in the introductory sentence as "the escape of blood from the vessels;" which always implies a solution of continuity of the vessels. Enlarging on this theme, the author proceeds to discuss the different forms of hæmorrhage, and the subsequent changes undergone by the escaped blood. The various causes of traumatic and spontaneous hæmorrhage are mentioned in the succeeding section, including direct injury to the vessels, degeneration of their walls, localized disturbances of the circulation and finally general diseases. Equally exhaustive is the next section on the sources of hæmorrhage. The reader will find here many curious and interesting facts, which have been culled from many different sources and skilfully blended into an harmonious whole. Every possible variety of lesion in arteries, veins, capillaries or lymphatics, whether produced experimentally in animals or accidentally in man, is described. Only three pages are given to the symptoms and diagnosis of hæmorrhage, but these cover the whole ground.

The paragraph on spontaneous internal hæmorrhage is rather vague and unsatisfactory, but that is true of the subject itself. Section 5, on the sequelæ, is exhaustive. Loss of blood may be fatal at once, it may cease, to return at intervals until it stops entirely or the patient succumbs, or it may cease spontaneously after a short time. Death from bleeding, we are told, is due essentially to the stopping of the circulation, which is caused, not so much by the weakened heart-beats, as it is by the lowering of the arterial tension, which prevents the filling of the veins. This assertion he defends at length, quoting the results of experiments on animals. A loss of about 3,200 gms. of blood will result fatally to an adult. The local and general phenomena observed after successive hæmorrhages are next referred to, the chemical and microscopical changes in the blood being stated at length. In treating of the spontaneous cessation of bleeding, the subject of physiological coagulation receives careful consideration.

Section 6, on the repair of wounded vessels, and the after-history of the extravasated blood is one of the longest and best in the book, containing three excellent original drawings (pages 50 and 51). Dr. Heineke enters thoroughly into the subject, quoting freely from the latest authorities. The "fate of extravasations," as he expresses it, forms the greater part of the section, and is described in a manner which recalls Professor Billroth's popular lectures upon the same theme with the difference that the present treatise is intended for more advanced students. A short section (which seems out of place here) on the entrance of air into the veins concludes the first chapter. The fatal issue of this accident is ascribed to "anæmia of the brain, spinal cord and heart, as well as a general deficiency of oxygen"—rather a complicated explanation it would seem.

We naturally expect to find a writer on surgery most at home in that part of his work which bears upon the actual practice of his art, rather than its theories. This expectation is not entirely fulfilled in the present volume. The author begins the chapter on treatment by dividing the agents used in controlling hæmorrhage into two general classes, the direct and the indirect. Under the first class he includes "such means as act by lowering the blood pressure, or at least by preventing its elevation." Venesection, rest, elevation of the part and cardiac sedatives are severally discussed. To the second group belong the local agents, such as cold, heat, ergot, and the so-called styptics. Hot water should be preferred to cold, since it is not only more efficient in arresting hæmorrhage, but acts as a decided stimulant, where cold tends to increase the condition of collapse which is already present. The author looks with true surgical contempt upon the employment of ergot to arrest hæmorrhage, the source of which can be reached more directly. He prefers the sesquichloride of iron as a styptic, but only uses it under protest. The use of the actual cautery is described, its scope being regarded as limited. Its true function is to stop capillary, or parenchymatous, bleeding.

The most important local agent is compression, which, according to one author, may be applied indirectly or directly. The subject of digital compression, of tourniquets and the rubber bandage is entered into at length. Acupressure, torsion, direct and indirect ligature are duly described, and a few pages are devoted to the matter of collateral circulation. An interesting historical sketch is followed by a short section on the proper application of the different agents described in the preceding pages. The suggestions are sensible and to the point. There are some valuable notes as to the best means of compressing bleeding vessels within the cranium and abdominal cavity. The

writer's teaching may be summarized in a few words—always look for the source of the hæmorrhage, and tie the bleeding point in the wound if possible.

Under the heading "Prophylaxis of Hæmorrhage," its prevention during surgical operations is meant. To this end the surgeon should (1) adopt bloodless methods of operating; (2) control the arteries; (3) empty the part of blood as far as possible. The first is sometimes impossible, but may be in part effected by care in making the incision and the employment of the *écraseur* and galvano-cautery. Local anæmia of a limb may be secured by the *tourinquet* or by Esmarch's bandage. Particular stress is laid upon the fact that most of the accidents (paralysis, gangrene, etc.) which have followed so-called "bloodless" operations have resulted from too great and prolonged compression of the part. "In order to perfectly compress the vessels," it is stated, "it is not necessary to apply the firmest pressure that can be obtained with an elastic bandage." Moreover, the constriction should not last *more than an hour*. The writer proves by quotations from Ranke and Bruns that the fear of increasing the general arterial tension to an injurious extent by forcing the blood out of the extremities is groundless.

The section on "Treatment of the Results of Hæmorrhages" is short and unsatisfactory. As regards extravasations, we read that "in every case massage occupies the foremost place among the means that have been recommended for hastening the absorption of sanguineous effusions. Early puncture is advised in all cases of extensive hæmorrhages into synovial pouches. All readers will not be disposed to accept this teaching without reservations.

Chapter III. takes up the subject of "On Transfusion and Infusion." The indication for transfusion is "collapse, due to a sudden and profuse loss of blood." But since, as has been proved by Goltz and other experimenters, the phenomena observed after severe hæmorrhages are due to "emptying of the vascular pump" (*Leergehen des Gefässpumpwerkes*); this deficiency can be supplied just as well by a solution of salt, as by defibrinated blood. This use of salt-solution is called, by way of distinction, "infusion." A 0.7 per cent solution, without the addition of an alkali, is recommended, the amount infused varying from 500 to 1,000 grammes. In spite of the brilliant results that have followed the use of this simple injection, the writer agrees with the assertions of Landois and Maydl that in extreme cases its effects do not always equal those obtained by the transfusion of blood. Another valuable use of transfusion is in cases of poisoning from carbonic acid gas, chloral, chloroform and ether, phosphorus and

opium; also in uræmia, asphyxia, and even in the treatment of severe burns. Salt solution can not be depended upon in these cases. Dr. Heineke is opposed to the employment of transfusion in septic conditions, since he rightly believes that we thus only add fuel to the fire. Chronic anæmia and inanition are better treated by medication and proper nourishment. In conclusion the author states that there are really only two conditions in which transfusion is directly indicated—profound exhaustion after hæmorrhage, and urgent symptoms of poisoning. On the whole this chapter is a disappointing one. We should have expected from a practical surgeon less theory, and more details, especially concerning the injection of salt solution, with the technique of which every surgeon ought to be familiar at the present day, since he is liable to be called upon to perform the operation at a moment's notice, and with the crudest instruments. The author had it in his power to make this the freshest and most interesting chapter in the book, but he has chosen to devote most of his space to the consideration of technical details with which every reader is familiar. Yet this monograph contains no small amount of information, which could otherwise be obtained only by a wearisome search through a voluminous bibliography. The book bears every evidence of careful research and judicious condensation. That it is uneven is perhaps due to the wide field which the author was obliged to cover. The author's style is clear, and the work is, in the main, free from long-involved sentences. The absence of an index detracts not a little from the usefulness of the book.

H. C. COE.

DIE NEUBILDUNGEN DES UTERUS. Von Dr. A. GUSSEROW, O.O. Professor der Geburtshülfe und Gynäkologie in Berlin. Mit 51 in den Text gedruckten Holzschnitten. Pp. VII-262.

DIE KRANKHEITEN DER OVARIEN. Von Dr. ROBERT OLSHAUSEN, O.O. Professor der Gynäkologie, Director der Universitäts Frauenklinik in Halle. Mit 36 in den Text gedruckten Holzschnitten. Pp. XXXVIII-469.

DIE KRANKHEITEN DER TUBEN, DER LIGAMENTE, DES BECKENPERITONEUM UND DES BECKENBINDEGEWEBES, EINSCHLIESSLICH DER EXTRAUTERIN-SCHWANGERSCHAFT. Von Dr. L. BANDL, A.O. Professor der Geburtshülfe und Gynäkologie in Wien. Mit 32 in den Text gedruckten Holzschnitten. Pp. XX-232. Stuttgart: Verlag von Ferdinand Enke. 1886.

The almost simultaneous appearance of these excellent monographs (numbers 57, 58 and 59 of the "Deutsche Chirurgie,") justifies us in

considering them together. These works may be considered as revisions of similar ones which appeared in the "*Handbuch der Frauenkrankheiten*."

Dr. Gusserow's work has been introduced to the English reader in his own tongue, so that it will require but a brief notice. Over one-half of the monograph is devoted to fibromata, which, it is safe to say, have never been so thoroughly discussed elsewhere. Material alterations will be noticed in many places, ten additional pages having been interpolated. Most of the old illustrations have been retained and some new ones added, mostly drawings from microscopical preparations. (Comp. figs. 20, 21 and 22). Omitting special reference to each of the remaining divisions of the work, it may be said of the book, as a whole, that it is rather uneven in character. This is doubtless its greatest fault. Many sections which one would expect to find exhaustive are too brief, and matter that could have been spared with benefit to the reader is still retained. The paucity of its recent bibliography is more noticeable, because this fault cannot be imputed to any other work in the series.

Dr. Olshausen's work has long borne such an enviable reputation as a scientific treatise on diseases of the ovaries that the present edition does not require a minute examination. Thirty-eight pages of bibliography precede the first chapter, an array of authorities which attests the thorough manner in which the author has treated his theme. In glancing at the text we do not remark so much the addition of new matter as the thorough revision of the old. It is curious to remark the incompleteness of statistics that have evidently been compiled with great care. The author's own list of cases (293, with a mortality of 9.1%) is about the only one that is carried up to date. The pathology of the subject is handled in such a manner as to win our warmest approval. The differential diagnosis is exhaustive. Nearly 200 pages are devoted to the treatment of ovarian cysts, the operation of ovariectomy and its possible complications receiving the most careful attention. All the possible affections of the ovary are described at length. Chapter XVIII deals with the subject of oöphorectomy and the different indications for the operation. In discussing the conditions known as chronic oöphoritis and perioöphoritis, which he regards as indications for the removal of the ovaries, we are confronted by the following italicized sentence, which the thoughtful reader will scarcely approve: "There are unquestionably changes in the ovary almost invisible, and clinically of a sort not at all recognizable, which, nevertheless, may produce severe and permanent pathological phenomena, so that castration may even be beneficial, and may be indicated in cases

in which anatomical changes are not demonstrable" (p. 451, at bottom). Whatever may be a surgeon's acumen, or however great his success as an operator, such doctrine as this must be characterized as both unscientific and inhumane. We should be sorry to see our future gynecologists carried away by any such "brilliant (?) surgery" as this, even though it be championed by such an acknowledged authority as Dr. Olshausen. If a woman's ovaries are to be removed on suspicion, the Malthusian idea will cease to be an ideal one. With the exception of a few touches of this ultra-enthusiasm we regard this monograph as one without an equal. It differs from other works on the ovaries just as a scientific treatise differs from a popular text-book. We do not regard the omission of the indices from this and from the other two volumes as in any sense an improvement upon the former editions. In such an exhaustive volume as the one just considered an index is a necessity and its absence a positive blemish in an otherwise perfect book.

In turning to Bandl's work on the uterine appendages we expect to note the influence of the recent ideas popularized in this country by Mr. Tait. The presence of several new drawings will first be noted. Most of these (which are excellent) will be found in the chapter on extra-uterine pregnancy. It will next be remarked that the diagnosis, complications and treatment of pyosalpinx have not been materially improved. The reader will look in vain for that reference to Mr. Tait's writings which he certainly deserves; he will seek for a satisfactory statement of the difficulties of differential diagnosis and the methods of overcoming them. The operation of salpingotomy is dismissed with a few words, as if it was the easiest and the most simple problem presented to the laparotomist. An intelligent description of the best method of loosening and removing a purulent tube, when buried in a mass of adhesions, has not been presented to the profession.

The chapter on extra-uterine pregnancy is thorough. In paragraph 55 (page 87) we read that the foetus may be killed by electricity, but strangely enough no reference is made either to the *technique* of the operation or to the actual results, the writer making the confession (which is unusually humble for a German) that his countrymen have had no experience with this method of treatment.

It is unnecessary to examine at length the chapters upon pelvic peritonitis and parametritis. The pathology of the subject is treated at length. No less than thirty pages are given to the subject of adhesions following pelvic inflammation (chapter V.), the subject matter being exceedingly well arranged, Chapter VI., on hæmatocele, is ex-

haustive. The concluding chapter deals briefly with new growths of the broad ligaments and pelvic connective tissue.

We have no hesitation in assigning these three monographs to a prominent place in the library of the specialist. He will frequently have occasion to refer to them as to ultimate authorities. Their scholarship is of a high order, while the copious references and foot-notes with which they are filled will render them invaluable to any one who desires to work up the special subjects of which they treat.

H. C. COE.